

Biomass Reforestation for Boreal Forests— March 28, 2013 progress report

Collection of poplar cuttings has been completed. An estimated 4,000 cuttings were collected in the Mat-Su valley, and an estimated 4,000 were collected in Delta Junction area. Whips were collected from 2012 season growth then cut to 8 to 10 inch (20-25 cm) cuttings. Cuttings were placed in heavy plastic bags and put in frozen storage at the Plant Material Center near Palmer. More cuttings were collected that expect to be plating, thereby giving opportunity for selecting best cuttings for planting. Photos and video clips were taken of collection.

Field sites have been tentatively selected and describe in subsequent page. Due to travel constraints in winter from snow, final plot selections must wait until nearer to planting date. Stooling beds are expected to be rows with cuttings every 2' and rows spaced 4' apart. Reforestation field sites are expected to be square plots with 400 cuttings per site. Cuttings will be 4' apart.

The planting design will be a randomized block design. Two planting dates will be used, early June and late June. Previous work with poplar has reported that low soil temperatures inhibit root formation, hence June will be earliest planting date. Previous work with poplar in Alaska has found that cuttings planted after July 1 suffered extensive frost damage. Planting date will be principle treatments. The two regions will be blocks, and field sites will be replicates. The experiment will be analyzed by ANOVA.







NORTH
to
the
CURE
SHA

ALASKA